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EXAMINER	
TSAI, CAROL S W	

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2857	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Interview Summary	Application No.	Applicant(s)	
	09/657,181	MOSKOWITZ ET AL.	
	Examiner	Art Unit	
	Carol S. Tsai	2857	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Carol S. Tsai, Examiner*. (3)_____.

(2) *Scott A. Moskowitz, applicant*. (4)_____.

Date of Interview: *18 July 2007*.

Type: a)☒ Telephonic b)☐ Video Conference
c)☐ Personal [copy given to: 1)☐ applicant 2)☐ applicant's representative]

Exhibit shown or demonstration conducted: d)☐ Yes e)☐ No.
If Yes, brief description: _____.

Claim(s) discussed: *1-25*.

Identification of prior art discussed: _____.

Agreement with respect to the claims f)☒ was reached. g)☐ was not reached. h)☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: *Examiner asked Mr. Moskowitz to file a new proposed amendment based on the discussion during the interview held on June 27, 2007 in order to put the claimed invention in the condition of allowance since appropriate correction is required for overcoming the informalities of claims. A new proposed amendment is received and all of the informalities of claims have been corrected.*.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

CAROL S.W. TSAI
PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

_____
Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)
In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address - either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

As per instructions ... for comment and review

July 18, 2007

DRAFT DO NOT ENTER INTO FILE – FOR DISCUSSION PURPOSES ONLY
ALLOWABLE SUBJECT MATTER – CLAIMS 2-5, 7, 9-11, 14-17, 20 AND 25 REWRITTEN IN INDEPENDENT FORM WITH CLAIM STATUS IDENTIFIERS

1. (canceled)

2. (currently amended) [The method of claim 1 wherein] A method for monitoring and analyzing at least one signal comprising:

receiving at least one reference signal to be monitored;

creating an abstract of said at least one reference signal wherein the step of creating an abstract of said at least one reference signal comprises:

inputting the reference signal to a processor;

creating an abstract of the reference signal using perceptual qualities of the reference signal such that the abstract retains a perceptual relationship to the reference signal from which it is derived;

storing the abstract of said at least one reference signal in a reference database;

receiving at least one query signal to be analyzed;

creating an abstract of said at least one query signal wherein the step of creating an abstract of said at least one query signal comprises:

inputting the at least one query signal to the processor;

creating an abstract of the at least one query signal using perceptual qualities of the at least one query signal such that the abstract retains a perceptual relationship to the at least one query signal from which it is derived[.]; and

comparing the abstract of said at least one query signal to the abstract of said at least one reference signal to determine if the abstract of said at least one query signal matches the abstract of said at least one reference signal.

3. (currently amended) [The method of claim 1 further comprising:] A method for monitoring and analyzing at least one signal comprising:

receiving at least one reference signal to be monitored;

creating an abstract of said at least one reference signal;

storing the abstract of said at least one reference signal in a reference database;

receiving at least one query signal to be analyzed;

creating an abstract of said at least one query signal; [and]

comparing the abstract of said at least one query signal to the abstract of said at least one reference signal to determine if the abstract of said at least one query signal matches the abstract

of said at least one reference signal[,];

creating at least one counter corresponding to one of said at least one reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and the abstract of said at least one reference signal; and

incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.

4. (currently amended) The method of claim [1] 3 further comprising:

recording an occurrence of a match between the abstract of said at least one query signal and the abstract of said at least one reference signal; and

generating a report that identifies the reference signal whose abstract matched the abstract of said at least one query signal.

5. (original) The method of claim 4, further comprising:

recording an occurrence of a match between the abstract of said at least one query signal and the abstract of said at least one reference signal.

6. (canceled)

7. (currently amended) The method of claim [1] 2, wherein the step of creating an abstract of said at least one reference signal comprises:

using a portion of said at least one reference signal to create an abstract of said at least one reference signal; and

the step of creating an abstract of said at least one query signal comprises:

using a portion of said at least one query signal to create an abstract of said at least one query signal.

8. (canceled)

9. (currently amended) [The method of claim 8,] A method for monitoring a plurality of reference signals, comprising:

creating an abstract for each of the plurality of reference signals wherein the step of creating an abstract for each of a plurality of reference signals comprises:

inputting each of the plurality of reference signals to a processor;

creating an abstract of each one of the plurality of reference signals using perceptual qualities of each one of a plurality of reference signals such that the abstract retains a perceptual relationship to the reference signal from which it is derived [and];

storing each of said abstracts in a reference database;

receiving at least one query signal to be analyzed;

creating an abstract of each of the at least one query signals wherein the step of creating an abstract of each of the at least one query signals comprises:

inputting each of the at least one query signals to a processor;

creating an abstract of each one of a plurality of reference signals using perceptual qualities of each one of a plurality of reference signals such that the abstract retains a perceptual relationship to the reference signal from which it is derived;

locating an abstract in the reference database that matches the abstract of each at least one query signal; and

recording the identify of the reference signal whose abstract matched the abstract of each at least one query signal.

10. (currently amended) The method of claim [8] 9, wherein

the step of creating an abstract of said at least one reference signal comprises:

using a portion of said at least one reference signal to create an abstract of said at least one reference signal;

and the step of creating an abstract of said at least one query signal comprises:

using a portion of said at least one query signal to create an abstract of said at least one query signal.

11. (currently amended) [The method of claim 8, further comprising:] A method for monitoring a plurality of reference signals, comprising:

creating an abstract for each of the plurality of reference signals;

storing each of said abstracts in a reference database;

receiving at least one query signal to be analyzed;

creating an abstract of each of the at least one query signals;

locating an abstract in the reference database that matches the abstract of each at least one query signal; [and]

recording the identify of the reference signal whose abstract matched the abstract of each at least one query signal[.];

creating at least one counter corresponding to one of said plurality of reference signals, said at least one counter being representative of the number of times a match is found between the abstract of said at least one query signal and an abstract of one of said plurality of reference signals; and

incrementing the counter corresponding to a particular reference signal when a match is found between an abstract of said at least one query signal and the abstract of the particular reference signal.

12. (canceled)

13. (canceled)

14. (currently amended) [The system of claim 13, further comprising:] A computerized system for monitoring and analyzing at least one signal:

a processor that creates an abstract of a signal using selectable criteria;

a first input that receives at least one reference signal to be monitored, said first input being coupled to said processor such that said processor may generate an abstract for each reference signal input to said processor;

a reference database, coupled to said processor, that stores abstracts of each at least one reference signal;

a second input that receives at least one query signal to be analyzed, said second input being coupled to said processor such that said processor may generate an abstract for each query signal;

a comparing device, coupled to said reference database and to said second input, that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts[.];

a storage medium coupled to said first input, that stores each of said at least one reference signals to be monitored; and

a controller coupled to the first input, the processor, the comparing device, the reference database and the storage medium, said controller causing an abstract for each reference signal being input for the first time to be compared to all previously stored abstracts in the reference database, such that in the event that the comparing device determines that it cannot distinguish between the abstract of a reference signal being input for the first time from a previously stored abstract in the reference database, the controller adjusts the criteria being used by the processor and re-generates the reference database, by re-processing each reference signal stored on the storage medium to create new abstracts and storing said new abstracts in the reference database.

15. (original) The system of claim 14, wherein the controller includes a means to adjust compression rates at which the processor processes a signal to create an abstract.

16. (currently amended) [The system of claim 13] A computerized system for monitoring and analyzing at least one signal:

a processor that creates an abstract of a signal using selectable criteria;

a first input that receives at least one reference signal to be monitored, said first input being coupled to said processor such that said processor may generate an abstract for each reference signal input to said processor;

a reference database, coupled to said processor, that stores abstracts of each at least one reference signal;

a second input that receives at least one query signal to be analyzed, said second input being coupled to said processor such that said processor may generate an abstract for each query signal;

a comparing device, coupled to said reference database and to said second input, that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts[.], wherein the comparing device identifies at least two abstracts in the reference database that match the abstract of said at least one query signal and an index of relatedness to said at least one query signal for each of said at least two matching abstracts.

17. (currently amended) The system of claim [13] 16, further comprising:

a security controller that controls access to a secured area, such that access is granted only if the comparing device confirms that an abstract of said at least one query signal matches an abstract of said at least one reference signal.

18. (canceled)

19. (canceled)

20. (currently amended) The system of claim [13] 16, further comprising:

a recorder that records the identify of the reference signal whose abstract matched the abstract of said at least one query signal; and

a report generator that generates a report that identifies the reference signals whose abstracts matched the abstract of said at least one query signal.

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (currently amended) [The system of claim 21, further comprising:] A electronic system for monitoring and analyzing at least one signal, comprising:

a first input that receives at least one reference signal to be monitored,

a first processor that creates an abstract of each reference signal input to said first processor through said first input;

a second input that receives at least one query signal to be analyzed,

a second processor that creates an abstract of each query signal;

a reference database that stores abstracts of each at least one reference signal;

a comparing device that compares an abstract of said at least one query signal to the abstracts stored in the reference database to determine if the abstract of said at least one query signal matches any of the stored abstracts[.];

a storage medium coupled to said first input, that stores each of said at least one reference signals to be monitored; and

a controller that compares an abstract for each reference signal being input for the first time to be compared to all previously stored abstracts in the reference database, such that in the event that the comparing device determines that it cannot distinguish between the abstract of a reference signal being input for the first time from a previously stored abstract in the reference

database, the controller adjusts the criteria being used by the processor and re-generates the reference database, by re-processing each reference signal stored on the storage medium to create new abstracts and storing said new abstracts in the reference database.

IN THE CLAIMS

1. (Previously Presented) A computer system, having data storage means and a memory, for determining sunlight exposure of an area, said system including:

input means for receiving and storing in the memory area data entries which define a size and shape of the area and a first and at least one second predetermined location;

input means for receiving and storing in the memory temporal data entries defining a time and date range;

input means for receiving and storing in the memory obstruction data entries defining a size and relative position of at least one sunlight obstructing object;

processing means for performing sun calculations which determine multiple solar positions of the sun in the sky based on the temporal data entries and the area data entries;

processing means for performing shadow calculations for each solar position, said shadow calculations determining a size, shape and position relative to the area of a shadow cast by the or each sunlight obstructing object;

processing means for determining for each square unit of the area a sunlight exposure time based on the shadow calculations;

output means for generating shadow calculation results and portraying a representation of the shadow calculation results; and

output means for generating sun calculation results and portraying a representation of the sun calculation results.

2. (Previously Presented) A computer system as in claim 1 wherein the area data entries include:

an earth based latitude of the area,

a magnetic declination of the area

area azimuth readings of multiple points on a perimeter of the area, and

area distance readings of each of the multiple points on the perimeter, wherein

said area distance readings are measured between each of the multiple points on the perimeter and the first predetermined location, and

said area azimuth readings are relative to magnetic north and are determined from said first predetermined location.

3. (Original) A computer system as in claim 2 wherein the first predetermined location is

within the area and the area data entries include a longitude of the area.

4. (Original) A computer system as in claim 1 wherein the area data entries include, for at least one second predetermined location, second location azimuth readings relative to magnetic north and second location distance readings, wherein second location azimuth readings are determined from the first predetermined location and the second location distance readings are measured between the at least one second predetermined location and the first predetermined location within the area.

5. (Previously Presented) A computer system as in claim 1 wherein the obstruction data entries include:

obstruction azimuth readings of the or each sunlight obstructing object,

obstruction distance readings for the or each sunlight obstructing object, and

at least one elevation reading for the or each sunlight obstructing object, wherein

said obstruction distance readings are measured between a location of the or each of the sunlight obstructing object and a location chosen from the group comprising the first predetermined location and the second predetermined location, and

said obstruction azimuth readings are relative to magnetic north and are determined from a location chosen from the group comprising the first predetermined location and the at least one second predetermined location.

6. (Previously Presented) A computer system as in claim 5 wherein the at least one sunlight obstructing object is a tree and wherein the obstruction data entries further include:

a tree crown shape for the or each tree,

a crown upper elevation reading for the or each crown of the or each tree,

a crown lower elevation reading for the or each crown of the or each tree,

a left crown azimuth reading for the or each crown of the or each tree, and

a right crown azimuth reading for the or each crown of the or each tree, wherein

said crown elevation readings are measured between a location of the or each of the sunlight obstructing object and a location chosen from the group comprising the first predetermined location and the at least one second predetermined location, and

said crown azimuth readings are relative to magnetic north and are determined from a location chosen from the group comprising the first predetermined location and the at least one

second predetermined location.

7. (Original) A computer system as in claim 6 wherein the obstruction data entries include at least one growth rate for the or each tree and an aging time span.

8. (Original) A computer system as in claim 7 further including processing means for increasing the crown azimuth readings and the crown elevation readings for the or each tree based on the or each growth rate and the aging time span.

9. (Previously Presented) A computer system as in claim 1 wherein the at least one sunlight obstructing object is a block of trees and wherein the obstruction data entries further include:

tree block azimuth readings of multiple points on a block perimeter of the block of trees,

tree block distance readings of each of the multiple points on the block perimeter,

an average crown upper elevation reading for the block of trees, and

an average crown lower elevation reading for the block of trees, wherein

said tree block azimuth readings are relative to magnetic north and are determined from a location chosen from the group comprising the first predetermined location and the at least one second predetermined location, and

said tree block distance readings are measured between each of the multiple points on the block perimeter and a location chosen from the group comprising the first predetermined location and the at least one second predetermined location.

10. (Previously Presented) A method of modifying foliage on a golf course to provide more sunlight to a golf green comprising:

determining characteristics of the green including size, shape, and location of the green;

determining characteristics of the foliage including size, shape, and location relative to the green;

performing a sun simulation of a path of the sun across the sky during a predetermined date and time range;

performing a shadow simulation of shadows cast on the green by the foliage based on the sun simulation and the characteristics of the foliage;

performing a unit area calculation for each unit area of the green, said unit area calculation determining an amount of sunlight each unit receives based on the shadow

simulation;

determining at least one course of action to provide more sunlight to the green based on the unit area calculation, the or each course of action being chosen from a group comprising

pruning the foliage,

removing the foliage, and

relocating the foliage;

performing a modified shadow simulation of the shadows cast on the green by the foliage if the or each course of action were followed, said modified shadow simulation being based on the sun simulation and projected characteristics of the foliage; and

performing a modified unit area calculation for each unit area of the green, said modified unit area calculation determining a modified amount of sunlight each unit receives based on the modified shadow simulation.

11. (Previously Presented) A method of determining modifications to sunblocking objects on a golf green to provide more sunlight to the green, the method comprising:

a) determining a size, shape, and geographical location of the green;

b) determining a size, shape, and position relative to a predetermined point of at least one sunblocking object;

c) determining a relevant path of the sun across the sky as observed from the geographical location of the green for a predetermined date and time range;

d) performing a shade calculation resulting in shade results, said shade results determining an amount of shade cast on the green by the or each sunblocking object based on the relevant path of the sun and the size, shape, and position of the or each sunblocking object;

e) performing a modified calculation resulting in modified shade results, said modified shade results determining a modified amount of shade cast on the green by the or each sunblocking object based on the relevant path of the sun and a modification of the or each sunblocking object, said modification being chosen from a modification group comprising

altering the shape of the or each sunblocking object,

removing the or each sunblocking object,

altering the size of the or each sunblocking object, and

a combination of altering the size and the shape of the or each sunblocking object;

f) determining which modification from the modification group provides more sunlight to the golf green based on a comparison of the shade results and the modified shade results; and

g) generating a visual representation of the shade results and the modified shade results.

12. (Original) A method as in claim 11 wherein step e) further includes generating a visual representation of the or each sunblocking object.

13. (Previously Presented) A computer system, having data storage means and memory, for determining sunlight exposure of at least one selected area of ground, turf or other low-lying outdoor area over one or more selected time and date ranges, with the selected area being in the vicinity of one or more existing or simulated trees, bushes or other objects which each constitute an actual or potential sunlight obstructing object relative to the selected area, said system comprising:

means for storing in the memory area data entries which define a size and shape of the selected area:

means for storing in the memory temporal data entries defining at least one time and date range;

means for storing in the memory obstruction data entries defining a size and position of at least one sunlight obstructing object;

processing means for performing sun calculations which determine multiple solar positions of the sun in the sky based on the temporal data entries and the area data entries;

processing means for performing shadow calculations for each solar position, said shadow calculations determining a size, shape and position relative to the selected area of a shadow cast by the or each sunlight obstructing object;

processing means for determining, for each square unit of the selected area, a sunlight exposure time based on the shadow calculations;

output means for generating shadow calculation results and portraying a representation of the shadow calculation results; and

output means for generating sun calculation results and portraying a representation of the sun calculation results.

14. (Previously Presented) A computer system as in claim 13 wherein at least one of the data entries used by the processing means for performing sun calculations includes an earth based latitude of the selected area.

15. (Previously Presented) A computer system as in claim 14 where the area data entries further include: area azimuth readings of multiple points on a perimeter of the selected area, and area distance readings of each of the multiple points on the perimeter.

16. (Previously Presented) A computer system as in claim 15 wherein:

the area data entries include a first predetermined location associated with the selected area, and at least one second predetermined location associated with the selected area; and

said area distance readings are measured between each of the multiple points on the perimeter and the first predetermined location.

17. (Previously Presented) A computer system as in claim 16 wherein:

said area azimuth readings a re relative to magnetic north and are determined from said first predetermined location,

the first predetermined location is within the selected area, and

the area data entries include a longitude of the area.

18. (Previously Presented) A computer system as in claim 13 wherein:

the area data entries include a first predetermined location associated with the selected area, and at least one second predetermined location associated with the selected area, which include, for at least one second predetermined location, second location azimuth readings and second location distance readings, and

the second location azimuth readings are determined from the first predetermined location and the second location distance readings are measured between the at least one second predetermined location and the first predetermined location within the area.

19. (Previously Presented) A computer system as in claim 13 wherein the obstruction data entries include:

obstruction azimuth readings of the or each sunlight obstructing object.

obstruction distance readings for the or each sunlight obstructing object, and

at least one elevation reading for the or each sunlight obstructing object.

20. (Previously Presented) A computer system as in claim 19 wherein:

the area data entries include a first predetermined location associated with the selected area, and at least one second predetermined location associated with the selected area.

said obstruction distance readings are measured between a location of the or each of the sunlight obstructing object and a location chosen from the group consisting of the first predetermined location and the second predetermined location.

21. (Previously Presented) A computer system as in claim 19 wherein:

the area data entries include a first predetermined location associated with the selected area, and at least one second predetermined location associated with the selected area, and

said obstruction azimuth readings are relative to magnetic north and are determined from a location chosen from the group consisting of the first predetermined location and the at least one second predetermined location.

22. (Previously Presented) A computer system as in claim 13 wherein said system is operatively arranged to handle a plurality of sunlight obstructing objects which are trees and wherein the obstruction data entries further include for each tree at least a tree crown shape for the tree and a crown upper evaluation reading for the tree.

23. (Previously Presented) A computer system as in claim 22 wherein the obstruction data entries further include for each tree a crown lower elevation reading for the tree, and at least one of crown azimuth reading for a tree selected from a group consisting of a left crown azimuth reading for the tree and a right crown azimuth reading for the tree.

24. (Previously Presented) A computer system as in claim 23 wherein:

said crown elevation readings for each tree are measured between a location of the first sunlight obstructing object and a location chosen from the group consisting of the first predetermined location and the at least one second predetermined location, and

said crown azimuth readings are determined from a location chosen from the group consisting of the first predetermined location and the at least one second predetermined location.

25. (Previously Presented) A computer system as in claim 13 wherein:

said system is operatively arranged to handle a plurality of sunlight obstructing objects which are trees,

the obstruction data entries further include for each tree include at least one growth rate for tree and an aging time span for the tree.

26. (Previously Presented) A computer system as in claim 25 wherein:

the obstruction data entries further include for each tree at least a tree crown shape for the tree and a crown upper evaluation reading for the tree, and at least one of crown azimuth reading for the tree,

said system further comprises processing means for increasing the crown azimuth readings and the crown elevation readings for each tree based on the growth rate and the aging time span for the tree.

27. (Previously Presented) A computer system as in claim 13 wherein:

the at least one sunlight obstructing object is a block of trees;

the obstruction data entries further include tree block azimuth readings of multiple points on a block perimeter of the block of trees, tree block distance readings of each of the multiple points on the block perimeter, and an average crown upper elevation reading for the block of trees, an average crown lower elevation reading for the block of trees.

28. (Previously Presented) A method of modifying foliage on a golf course to provide more sunlight to a golf green, the method comprising the steps of:

determining characteristics of the green;

determining characteristics of the foliage pertinent to the green;

performing a sun simulation of a path of the sun across the sky during a predetermined date and time range;

performing a shadow simulation of shadows cast on the green by the foliage based on the sun simulation and the characteristics of foliage;

performing a unit area calculation for each unit area of the green, said unit area calculation determining an amount of sunlight each unit receives based on the shadow simulation;

determining at least one course of proposes physical action relative to the foliage to provide more sunlight to the green based on the unit area calculation;

performing a modified shadow simulation of the shadows cast on the green by the foliage if each proposed course of action were followed, said modified shadow simulation being based on the sun simulation and projected characteristics of the foliage; and

performing a modified unit area calculation for each unit area of the green, said modified unit area calculation determining a modified amount of sunlight each unit receives based on the modified shadow simulation.

29. (Previously Presented) A method of modifying foliage as in claim 28, wherein:

the determined characteristics of the green include at least a plurality of green characteristics selected from the group of characteristics consisting of the size of the green, the shape of the green, and the location of the green;

the determined characteristics of the foliage include at least a plurality of foliage characteristics selected from a group characteristics consisting of the size of the foliage, the shape of the foliage, and the location of the foliage relative to the green; and

the proposed course of physical action to the foliage being chosen from a group of physical actions consisting of pruning at least some of the foliage, removing at least some of the foliage, and relocating at least some of the foliage.

30. (Currently Amended) A method of evaluating proposed modifications to sunblocking objects on an area of a turf~~, such as a golf, green~~ to provide more sunlight to the area ~~(e.g., the green)~~, the method including using a computer system to perform calculations and provide visual representations and comprising the steps of:

a) determining a geographical location of the green;

b) determining a three-dimensional location for each of a plurality of sunblocking objects in the vicinity of the green;

c) determining a relevant path of the sun across the sky as observed from the geographical location of the green for a predetermined date and time range;

d) performing a shade calculation resulting in shade results, said shade results determining an amount of shade cast on the green by each such located sunblocking object based on the relevant path of the sun and the three-dimensional location of each sunblocking object;

e) performing a modified calculation resulting in modified shade results, said modified shade results determining a modified amount of shade cast on the green by each located sunblocking object based on the relevant path of the sun and a proposed modification of at least a

plurality of the located sunblocking objects, said proposed modification being chosen from a modification group consisting of (1) altering the shape of the sunblocking object, (2) removing the sunblocking object, (3) altering the size of the sunblocking object, and (4) a combination of altering the size and the shape of sunblocking object; and

f) generating a visual representation o the shade results and of the modified shade results using the computer system.

31. (Currently Amended) A method as in claim 30, of evaluating modifications to sunblocking objects on an area of turf, ~~such as a green,~~ further comprising the step of:

g) determining which proposed modification from the modification group provides more sunlight to the golf green based on a comparison of the shade results and the modified shade results.

32. (Previously Presented) A method as in claim 30 wherein step (e) further includes using the computer system to generate at least one visual representation of each sunblocking object.

REMARKS

By this amendment, Applicant has amended claims 30 and 31. Claims 1-32 remain for consideration in the application.

Claim Rejections Under 35 U.S.C. § 112

Claims 30-32 were rejected under 35 U.S.C. § 112 as being indefinite. Claims 30 and 31 have been amended to remove the indefinite language, and are believed allowable. Claim 32 depends from allowable claim 30 and is also believed allowable.

Allowed Claims

Applicant thanks the Examiner for the allowance of claims 1-29.

CONCLUSION

In view of the above remarks and amendments, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No. 501373.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2203.

Respectfully submitted,

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